# Testimony of Tim Wu Professor, Columbia Law School

## House Committee on the Judiciary Telecom & Antitrust Task Force

Hearing on "Network Neutrality: Competition, Innovation, and Nondiscriminatory Access."

#### Introduction

Mr. Chairman, and Members of the Committee,

Over the last several months, the debate over Network Neutrality has provoked rather more of a reaction than I think anyone might have thought, and I want to begin by considering why.

I think there are several reasons. First and foremost, this is an issue that affects people directly. Once upon a time the internet was a kind of toy, used by hobbyists, scientists, and geeks. But today it's something different: it has become part of America's basic infrastructure. It has become as essential to people and to the economy as the roads, the electric grid, or the telephone. It's an infrastructure that people and firms depend on for everyday activities, whether planning weddings, managing investments, or running a small business.

Given this infrastructure, Americans are accustomed to basic rights to use the network as they see fit. That's why there's been surprise and indignation over plans, advanced by the Bells, to begin deciding what consumers want, by slowing down disfavored companies, and speeding up favored companies. It's as if the electric company one day announced that refrigerators made by General Electric would henceforth not work quite as well as those made by Samsung. That would be a shock, because when it comes to the electric grid and the internet, people are used to a network that they are free to use as they wish.

Second, whatever AT&T and others may claim as motives, the potential for abuse of market power is obvious to everyone. Ninety-four percent of Americans have either zero, one, or two choices for broadband access.<sup>1</sup> Many of us wish things were otherwise, but they are not.

<sup>&</sup>lt;sup>1</sup> Cf. Federal Communications Commissions, "High-Speed Services for Internet Access," as of 12/31/04, available at <a href="http://www.fcc.gov/wcb/iatd/comp.html">http://www.fcc.gov/wcb/iatd/comp.html</a>.

Given today's market, it's obvious that a firm like AT&T may earn, at the margin, more money by distorting competition among internet firms. It can, through implicit threats of degradation, extract a kind of protection money for those with the resources to pay up. It's basically the Tony Soprano model of networking, and while it makes some sense for whoever is in a position to make threats, it isn't particularly good for the nation's economy, innovation, or consumer welfare.

\* \* \*

The problem faced here is actually not new at all—it is a familiar problem of market power on networks that government has grappled with since the days of the telegraph. What I want to make clear is the central economic tradeoff involved in these kinds of cases. Letting the internet or any infrastructure become discriminatory may offer marginally more profit for operators. But it does so at the cost of a tax on network competition and innovation. Whether it's a nation's ports, roads, canals, or information networks, discrimination comes at a price to the activities that depend on the infrastructure.

That's why at nearly every stage in the history, governments have maintained at least a basic anti-discrimination rule to block the worst forms of anti-competitive behavior. And today, that's all that's needed – a simple ban on the worst kinds of behavior; a basic rule whose goal is simply to guarantee basic consumer rights and let the free market work.

# **Network Discrimination Problems in History and Today**

Problems of network discrimination are nothing new. Network owners with market power have always been tempted to use their gatekeeper position to discriminate between favored and disfavored uses.

The history, in fact, goes as far back as the 1860s, when Western Union, the telegraph monopolist, signed an exclusive deal with the Associated Press. Other wire services were priced-off the network – not blocked, but discriminated against.<sup>2</sup> The result was to build Associated Press into a news monopoly that was not just dangerous for business, but dangerous for American democracy. As telecommunications historian Paul Starr writes "Western Union had exclusive contracts with the railroads; AP had exclusive

<sup>&</sup>lt;sup>2</sup> For more on the early history of the telegraph, see Robert L. Thompson, Wiring a Continent: The History of the Telegraph in the United States 1832-1866 (1947); Daniel J Czitrom, Media and the American Mind: From Morse to McLuhan, ch. 1 (1982); Paul Starr, the Creation of the Media 184 (2005).

contracts with Western Union; and individual newspapers had exclusive contracts with AP. These linkages made it difficult for rival news services to break in." The AP monopoly had an agenda: it didn't just favor Google or Yahoo – it went as far as to chose politicians it liked and those it didn't. As Historian Menahem Blondheim has documented, AP used its Western Union-backed monopoly to influence politics in the late 19th century, even going so far as to exercise censorship on behalf of the State. The method was simple: when faced with messages from disfavored politicians, the wires simply didn't carry them.

A much more recent example comes from the 1960s, when the Bells would not allow anyone to hook up anything to their telephone system other than a Bell telephone. It took the courage of the D.C. Circuit, and later the FCC, to force Bell to accept a consumer's right to attach anything to the network not dangerous to the network. To that courage we owe better choice in telephones, and over time much more. To the freedom of network attachments we also owe the answering machine, the fax machine, and finally the modem and the whole birth of personal networking. I don't want to overstate the point, but freeing network attachments from Bell control, as technical as that sounds, has played a part in making this country the leader of the world in information technology. Here's what two FCC economists, Jay Atkinson & Christopher Barnekov, said about freeing network attachments from Bell control:

"we believe that the recent development of the Internet, and of much of Information Technology, would not have happened if CPE (for example, modems) were still marketed only by LECs. The blossoming of the CPE market into a highly competitive industry offering a wide variety of choice at low cost and rapid technological advances, and enabling previously unknown possibilities such as the increasingly numerous Internet services, is arguably a direct consequence of the deregulation of CPE."5

So what do we have today? In terms of market structure, you have a range of diverse and highly competitive markets operating on top of the internet's basic infrastructure. These markets are viciously competitive. Invent a new search engine, like Google did, and in a few years you can be a multi-

<sup>&</sup>lt;sup>3</sup> Starr, the Creation of the Media, 184.

<sup>&</sup>lt;sup>4</sup> On this episode, see *Carterfone*, 13 F.C.C.2d 420 (1968); See Jay Atkinson & Christopher Barnekov, A Competitively Neutral Approach to Network Interconnection 3 (Office of Plans & Policy, FCC, Working Paper No. 34, Dec. 2000); Kevin Werbach, Breaking the ICE, 4 J. Telecom & High Tech. L.J. (2005).

<sup>&</sup>lt;sup>5</sup> See Jay Atkinson & Christopher Barnekov, A Competitively Neutral Approach to Network Interconnection 3 (Office of Plans & Policy, FCC, Working Paper No. 34, Dec. 2000).

billion dollar concern. Write a popular blog, and if you're lucky you can have nearly as many readers as the New York Times. Conversely, many more businesses and ideas have failed, like the famed "pets.com," but usually on the merits.

These markets functioning on top of the internet are in many ways an economist's dream. Barriers to entry are low. Startup costs are minimal: many successful business began with just an idea and a good web site. Competition is mostly meritocratic – the best online stores win, not the ones with a famous names or the right connections. Meritocratic competition, in turn, leads to Darwinian or what economists call "Schumpeterian" innovation. That just means that new technologies supplant the old, in a constant process of industrial rebirth. In all, today's markets operating on top of the internet's neutral infrastructure may be some of the best examples of markets working like the free markets are supposed to.

But this thriving market has an Achilles heel. For there's one part of the net which isn't competitive at all: broadband access. The access networks are part of the old telecom world – monopolistic, slow-moving, well-connected in Washington, and prone to anti-competitive behavior. They are the "Broadband Bottleneck." And the Bells, who lead the way in their efforts to change the internet, are almost an extension of government, fed and raised on government subsidies and rate-setting since 1913 or so. It is no surprise that they should be leading the way, looking for a way to make the free market of the internet work more and more like the old Bell monopoly.

#### The Tradeoff

In any discussion of neutrality rules, the Bells and even the cable companies will always turn back to their one big argument: we need more money to build the infrastructure, and if you don't give it to us, we won't build it. I think the government needs to learn how to stand up to these kinds of threats. What we have here in truth is a tradeoff. The Bells want permission to discriminate in exchange for a promise that they'll use any money earned to build more infrastructure. But even *if* the Bells make more money, and even *if* that money is actually invested in infrastructure deployments, that doesn't mean the tradeoff costs don't exist. The tradeoff is a distortion, a tax, on the healthy markets that are on top of the basic network.

It is inevitable that a discriminatory infrastructure will affect competition and innovation in the markets that depend on it. Imagine, for a moment, that private American highway companies reserved a lane for Ford cars. That would be good for Ford, but obviously would affect competition as

between Ford and General Motors. It would also slow innovation—for it would no longer be the best car than wins, but the one that signs the best deals and slows down their competitors. The race is no longer to build a better car, but to fight for a better deal with the highway company.

That's the threat to innovation on the internet. Today, as I said early, you can start a business on the internet with relatively little capital. But in a world where AT&T or Verizon decides who gets priority access, entrepreneurs get a different message. Its not who has a better product: its who can make a deal with AT&T, Verizon, Comcast or Time-Warner. That's a different kind of market, one more like the old days of telecommunications. That's when starting a network business meant making a deal with a big Telco, or forget it.

In short, the long-term costs to the economy of allowing a discriminatory internet are real. Encouraging infrastructure investments is a serious challenge, but in the end one only tangentially related to the Network Neutrality debate. The real spur to network deployment and innovation will be market entry—whether municipal broadband, or otherwise, that scares today's providers into offering something better. Indeed, even given the limited competition we have today, it is the superiority of the cable network that has goaded the Bells into beginning fiber optic deployments. For these deployment decisions, facilities-based competition is the strongest answer, and letting gatekeepers tax application competition is really a sideshow. Taxing innovation is hardly the only, and probably the most expensive way to encourage infrastructure deployment.

### On the Case for Maintaining Government's Role

I think many people agree instinctively that an open and neutral internet has been a good thing for the nation. It's been good for consumers, good for entrepreneurs, and good for the U.S. economy. Countries become rich through innovation, and need basic infrastructure to innovate. That's often the difference between rich nations and poor – access to basic infrastructures needed to start a business. In this respect the neutral internet has been a sterling example of an infrastructure that has driven the national economy. Perhaps, in U.S. history, only the early canals, railways, roads, railways and electric networks can compare as boosters to the U.S. economy and the wellbeing of citizens.

Even if neutrality works better – something the cable operators, to their credit, agree with – there is a different kind of hesitation out there. It is as to whether government should be involved at all. After all, Congress has with some exceptions stayed away from trying to regulate the Net, and for the

most part that's been a good thing. There's no rate-setting, and no long battles over "internet unbundling."

But in truth things are more complex. As everyone knows, the essential initial research and build-out of the internet was funded by the Defense Department. That funding of research and development was an astonishing success, in part because the resulting design was so good it hasn't much needed government. The internet is by design diverse and decentralized, making competition on top of the infrastructure viciously competitive. That competition has ironed out many of the problems government might otherwise be needed to solve.

But while Government hasn't acted much to regulate applications, at the infrastructure side the story is completely different. The initial build-outs, as we already said, were all government funded. Thereafter, through the entire history of the internet, the Government has maintained some kind of rules to maintain basic neutrality on the network—to control, in effect, the bottleneck it helped create. We already discussed the deregulation of network attachment in the 1960s – a matter essential for letting consumers buy modems and hook them up, and a right that helped lead to a mass consumer internet. Later, the Federal Communications Commission, through the 1980s and 1990s maintained rules that protected the rights of dialup ISPs to reach customers over the phone lines. That tradition continued when, in the early 2000s, Chairman Michael Powell announced the "network freedoms" rules. In 2005 the FCC fined a regional phone company that was blocking Voice over Internet services, the latest of a long tradition of efforts to protect Network Neutrality.<sup>6</sup>

What do these stories have in common? At each stage, the internet's vigorous competition has relied on one baseline government guarantee: consumers get the use their network as they like. That's the same deregulatory instinct that government needs now – to guarantee consumers access to whatever content and applications they want, free of discrimination and playing favorites.

Some of you may feel hesitant, feel that government's role will necessarily be complex. It need not be. All government needs to say is this: leave things the way they are. It needs merely to recognize consumers' rights to access the content and applications of their choice, free from discrimination, and give meaningful remedies when those freedoms are interfered with.

6

<sup>&</sup>lt;sup>6</sup> "Madison River Communications, LLC Order and Consent Decree," March 3, 2005, <a href="http://www.fcc.gov/voip/">http://www.fcc.gov/voip/>.

The best proposals for network neutrality rules are simple. They ban abusive behavior like tollboothing and outright blocking and degradation. And they leave open legitimate network services that the Bells and Cable operators want to provide, such as offering cable television services and voice services along with a neutral internet offering. They are in line with a tradition of protecting consumer's rights on networks whose instinct is just this: let customers use the network as they please. No one wants to deny companies the right to charge for their services and charge consumers more if they use more. But what does need to be stopped is raw discrimination that is nothing more than a tax on innovation taken by government-supported corporations.

### **Conclusion**

This mission – protecting consumer choice against market power – is a minimum and appropriate role of government. I wouldn't be here if there were five broadband providers, each competing to give customers the best and fastest service possible. If that were the case, I am certain that the best service would win out – if one company blocked or slowed some companies, consumers would run away. If a rental car company doesn't let you drive the car where you wanted, you'd choose a different company. The problem is the lack of choice in this market.

Let me close by looking at who's on each side. The Bell companies have taken the lead in moving things back to the world where they pick and choose who gets better access on the network. Who wants that? Very few people. Not bloggers, libertarian, conservative, or liberal, who know that larger media outlets will be favored over them. Not the application makers, among the most active sectors of the nation's economy. Not anyone who dislikes or distrusts excesses of centralized power. Not even cable operators. And, when made aware, certainly not consumers. In fact, no one wants this but the Bells themselves, and perhaps that tells us something.